Great Lakes Wind on the Water Meeting Minutes: May 13, 2008

Meeting attendees included:

Commissioner Lauren Azar (PSC), Heather Leibham (We Energies), Mike Friis (DOA), Dave Siebert (DNR), Tia Nelson (BCPL), Dave Donovan (Xcel Energy), Richard Stadelman (WI Towns Association), Todd Vesperman, (US Army Corps of Engineers), Michael Vickerman (RENEW Wisconsin), Charlie Higley (CUB), Monica Groves Batiza, (WI Counties Association), Katie Nekola (Clean Wisconsin), Todd Stuart (WIEG), Scott Smith (Alliant Energy), Jeff Anthony (AWEA), Dan Sage (PSC), Emily Green (Sierra Club), Charlie Severance (WPS), Don Peterson (MGE), Flora Flygt (ATC), Karen Etter Hale (Audubon Society), Chairwoman Rose Gurnoe-Soulier (Red Cliff Band of Lake Superior Chippewa Indians (via teleconference)).

Introductions / Overview

Group members were given the opportunity to introduce themselves.

Open meetings and public records – Until we have firm answers about Open Meetings and Public Records requirements, group members are asked to refrain from communicating about this group (no phone, meetings or e-mail) with other group members off line.

• There is a request from group members for more information on lobbying in connection with this group. Will participants in the main group have to register as lobbyists? Can observers talk with members of either the main group or the working groups without registering as a lobbyist?

Review of the Great Lakes Wind on the Water Work Group Handout

Group members were asked to review the work group document, which outlines the groups (topics) and issues within each topic.

The work groups are outlined as follows:

- Legal
- Human Environment
- Engineering / Economics
- Community Outreach

Work group co-chairs were announced. They are as follows:

- Legal: Co-chairs for this group are not likely necessary; Lauren will lead if required.
- Economics / Engineering: Dan Sage (PSC), Flora Flygt (ATC)
- Environment: Dave Siebert (DNR), Noel Cutright (Audubon Society)
- Community Groups: Mike Friis (DOA), Mayor Kevin Crawford (Mayor of Manitowoc, Alliance of Cities)

Review of Charge of the Legal / Regulatory group

Possible additional charges / issues mentioned for this section:

- If we are entertaining statute changes to allow for development of wind energy on the Great Lakes, should we consider other technologies / energy generation explorations (e.g. wave energy).
- Because these are international waters, should we explore potential issues with the IJC?
- Tribal law should also be included in federal, state and local issues.
- DOJ can provide assistance with Public Trust / Water related issues. Key contact may be Tom Dosch.
- Follow up on Federal Register notice re National Guard using Lake Michigan for fake bombing exercises. We should contact the Brigadeer General of the National Guard for assistance if necessary.
- Explore relevant case law on Cape Wind.
- How do onshore wind projects (on tribal lands) affect offshore developments? It was noted in the discussion that various tribes may be looking at terrestrial wind energy projects.
- The legal group should interact with the National Park Service. One key contact may be the Lake Superior Park Service contact (Bob Krumenaker).
- "Consultations" should be added in addition to "approvals".
- Defining jurisdiction under this research will be a key task. Do legal interpretations change from state to state? (i.e. crossing over from WI into MI)?
- How does the work of this docket potentially interact with the Great Lakes Compact?

Potential group members may include:

Lauren Azar, Steve Levine, Tom German, Mike Cain, Tom Dosch and Jim Zorn.

Other suggested group members:

• Steve Adanksi. (nominated by Todd Vesperman).

Review of Charge of the Human Environment group

Additional charges / issues mentioned for this section:

- Areas of historical or cultural significance to the Tribes and general public. Jim Zorn (GLIFWC) is identified as a resource on this topic. Each nation will also have its own experts in this area.
- Examine flicker (sunset / sunrise on the water may especially be an issue). Also, consider if offshore wind turbines have any impact on communications, similar to DODconcerns re: radar in terrestrial projects. Not only should we explore this offshore, but near shore, as well.
- It is recommended our group ultimately put assessment of the offshore wind potential into context of the state's energy portfolio or RPS. Tia notes she'd like us to draw simple conclusion such as: "Ha, this gets us nothing" or "Ha! This gets us half-way there".
- It will ultimately be important for our group to better define ripiarian zones and understand limitations. There may be legal limits that serve as barriers to offshore wind development.
- Will a data inventory identify data gaps? Will this group be recommending ways to get missing data? How will we pay for it?

- Modify the charge to read from "construction and operation" to "construction, operation and decommissioning" of wind turbines.
- How do wind siting and human health concerns intersect on Great Lakes wind development?
- Generic EIS may have human health issues category that discusses aesthetics, EMF, Flicker, noise, etc.
- Socioeconomic also goes in EIS. The Community group may also want to take up some of these health and socioeconomic issues and concerns.
- Navigational safety issues should be investigated.
- Does the riparian community get a share of the development revenue? (Discussion ensued about whether this may be an economic issue).

Potential group members may include:

Audubon, Clean Wisconsin, Sierra Club, Members of the Tribal Nations (Red Cliff, Jim Zorn), DNR Staff, PSC Environmental Staff, Utility Representatives (We Energies, Alliant, ATC), U.S. Fish & Wildlife, US Coast Guard, FAA, AWEA (Laurie Jodziewicz), UW Water Institute – (Harvey? Mike Friis to send contact), Lake Carriers (Jim Weekly), Recreational Boating and / or Commercial fishing, WI Towns Association (Rick Stadelman)

Review of Charge of the Engineering and Economics group

Additional charges / issues mentioned for this section:

- Include specific examination of lake icing and icing of components under Technology
- Explore specific retro-fits of existing in-lake structures: Oar dock in Ashland
- Draft item 1b should also include decommissioning
- Transmission engineering should also examine icing specifically, the transmission transition from land to water
- Consider whether to use the term "transmission" or "electrical interconnection" or "radial collection". The verbage and equipment may truly depend on where you site the wind equipment and what types (size/capacity) of lines you use (what size/capacity).
- European countries have a tremendous knowledge base re: wind on the water. When applicable, this group should recycle public information / best offshore wind practices.
- MISO is assembling a study (due for release Spring '09) to examine the economics of moving wind down the wires re: wind development in MN, IA, IL and Wisconsin. Use these data where applicable.
- Cost sharing issues with MISO and the RECB.
- Difference in Xcel and ATC transmission infrastructure.
- Consider measurement of wind resources on the lakes (or recommendation for further measurement). Wind monitoring should potentially include radar to monitor for bird migration patterns. The technology is available.
- When examining cost and financing, Wisconsin should examine economies of scale and the minimum sale for our first project.
- Wind developers will be welcomed in work groups and to give presentations in connection with this effort. It is announced that specific developers were not chosen for the main group to keep group size manageable and to avoid picking one representative.
- There will be a cost to Lake Bed Leases but BCPL does not currently have estimates on what that cost will be. BCPL plans to examine leases in other states. It is recommended that BCPL

consider different charges for IPPs, public utilities, and public power producers. Further examination may be necessary from the perspective of whether it is an IPP or utility project. Revenue reinvestment options (offset wind development, carbon offsets) are currently also unknown.

- When exploring costs, maintenance should be included and estimated.
- Further discussion on the topic of costs ensues. It is suggested that it would be helpful to compare operational costs between a terrestrial wind project vs. lake wind project. Other members advocate for the analysis to go further to explore the benefits of wind vs. other sources of generation (coal, etc). Reusing data from the Task Force on Global Warming may be a possible resource for such a comparison. The group generally agrees to limit the scope of this group's cost estimates to Great Lakes Wind.
- Explore cost mitigation strategies, creative financing, etc.

Potential group members may include:

Utility representatives, AWEA (Jeff Anthony), RENEW Wisconsin, PSC Staff, Bob Owen, David Blecker, NREL (Walt Musial), WIEG.

Review of Charge of the Community Outreach Work Group

- This group should consider an exploration of socioeconomic benefits / issues.
- This group should think about community outreach in terms of both municipalities and grassroots groups.
- The Community presentations are meant to seek input.
- Are local communities directly interested in developing wind projects?
- This group should investigate whether European communities who have developed offshore wind projects have received community benefits or faced community opposition
- Create outreach plan.
- Provide / develop an objective resource guide for offshore wind development
- The community outreach component may best be assembled after the environmental and
 engineering components are explored. Communities will want to know what the plan looks like
 before responding; similarly, our community group will need to also know what it looks like
 before creating a communication plan. Since that is not possible, we should think of community
 outreach as a long term commitment.
- Community plans and land use regulation (item 3 on draft) should include interconnection. Local governments planning these projects will deal with interconnection.
- Involve regional planning commissions.
- Impacts on actual individuals need to be addressed. This group may discuss many positives to offshore wind developments, but some communities may have negative opinions of wind energy developments. Concerns about aesthetics, noise, flicker, etc need to be addressed.
- If group surveys community interest, it may consider surveying communities as to knowledge and opinions.
- Siting issues may drive community reaction and educational needs.

Potential group members may include:

Wisconsin Towns Association, Wisconsin Counties Association, Mayor Kevin Crawford, WI members of Great Lakes and St. Lawrence mayors (chair), Red Cliff Band (Chairwoman Soulier or designee), Alex DePillis,

Sierra Club, utility representatives (MGE, ATC)

Our group's product (wind report) will likely serve as a scoping document. Our group will present advantages, disadvantages and what to consider if you move forward developing wind energy projects on the Great Lakes.

Future meeting dates:

- Meeting 2: June 11 –Hold entire day.
- Meeting 3: June 23 9 a.m. to 11 a.m. (teleconference)
- Meeting 4: July 7 9 a.m. to 12 noon
- Meeting 5: July 29 -- Hold entire day.
- Meeting 6: August 11 Hold entire day
- Meeting 7: August 20 9 a.m. to 12 noon

Speaker ideas:

- AWEA
- Specific financiers
- AREVA Multibrid smaller group presentation
- Representatives from Cape Cod great for community outreach/ engineering
- Wind monitors / mappers
- NREL -- Walt (Jeff Anthony to contact) / Someone who's working on the wind atlas?
- Army Corps
- Great Lakes Wind Collaborative perspective on what's going on?
- MISO for subgroup presentation.

Finalized speakers' list for the June 11th meeting: AWEA, NREL and Great Lakes Wind Collaborative.

Discussion: Our group may want to explore how to integrate this investigation with other projects being explored (re: transmission) and how it relates to MISO cost sharing.

Dan Sage presented instructions for ERF and group members are encouraged to sign up for ERF updates and to receive all materials for the Great Lakes Wind docket.

An opportunity for public comment was offered. There were no public comments at the end of the meeting.